

APPENDIX

Please amend claims 1-3, 5-7, and 9-23, and add new claims 24-26, as follows:

--1. (Once Amended) Apparatus for enabling more than one communicative process to be carried on at the same time [via a single telephone] over a subscriber line, comprising:

a network interface means for connecting to a telecommunications network;

a telephone interface means for connecting to at least one telephone;

a computer interface means for connecting to at least one computer; and

[an internetwork protocol (IP)] a routing means communicatively connected to said [respective] network, telephone and computer interface means for managing the addressing of data between said network and [either or both of] said telephone and said computer; [and

a voice circuit for receiving and converting data routed from said IP routing means to said telephone, and for converting and feeding voice signals input from said telephone to said IP routing means;]

wherein said [IP] routing means assigns internal network addresses to said telephone and said computer, respectively, and selectively routes voice and data signals from said telephone and said computer, respectively, to and from said telecommunications network via said [telephone] subscriber line and based on said assigned internal network addresses.

2. (Once Amended) Apparatus of claim 1, further comprising:

a [voice over IP] gateway means for packetizing voice signals received from said telephone interface and depacketizing voice signals from said [IP] routing means, packetized signals being routed by said [IP] routing means for transmission to said telecommunications network and depacketized voice signals being routed to said telephone interface for establishing a

telephone conversation between a caller using said telephone and an other caller connected to said telecommunications network via [an other] another telephone.[.]

3. (Once Amended) Apparatus of claim 1, [further comprising:] wherein said routing means includes an address conversion and translation means for translating the respective internal network addresses of said telephone and computer to correspond with an external network address of said [telephone] subscriber line assigned to communicate with said telecommunications network.

5. (Once Amended) Apparatus of claim 4, wherein said packet prioritization module further prioritizes voice signals over data signals so that voice signals take precedent over data signals when both voice and data signals are being communicated between said apparatus and said telecommunications network using said [telephone] subscriber line.

6. (Once Amended) Apparatus of claim 1, wherein said [IP] routing means apportions the bandwidth of said [telephone] subscriber line for selectively routing the voice signals and data signals between said telephone and computer, respectively, and said telecommunications network.

7. (Once Amended) Apparatus of claim [1] 24, wherein said voice circuit comprises:
[a voice over IP gateway;]
an analog to digital converter for converting voice signals from said telephone into digital signals for routing to [said] a gateway that packetizes said digital signals;
a digital to analog converter for converting digital signals [received from] depacketized

by said gateway into voice signals to be routed to said telephone;

a ring generator for ringing said telephone when a voice signal is received at said gateway;

a dual tone multi-frequency (DTMF) generator for generating an address whereto a voice signal from said telephone is to be routed; and

a dial tone generator for generating a dial tone for said telephone when said telephone is taken off hook.

9. (Once Amended) A communications controller to be used at a site to connect to a telecommunications network, said site including at least one telephone and one computer both adaptable to be accessible to said telecommunications network, said communications controller comprising:

[at least one out site] a network interface means for effecting a connection with said telecommunications network via a [telephone] subscriber line;

[at least one in site] a telephone interface means for establishing a connection with said telephone;

[at least an other in site] a computer interface means for establishing a connection with said computer; and

[an internetwork protocol (IP)] a routing means communicatively connected to said [respective] network, telephone and computer interface means for assigning internal network addresses to said telephone and said computer, respectively, and for selectively routing voice signals and data signals between said telephone and computer, respectively, and said telecommunications network so that both voice and data signals are [simultaneously] communicated between said site and said telecommunications network using said [telephone]

subscriber line and based on said internal network addresses.

10. (Once Amended) Communications controller of claim 9, [further comprising:]
wherein said routing means includes an address conversion and translation means for assigning
[respective in site] said internal network addresses for said telephone and computer, and
correlating said [respective in site] internal network addresses with an [out site] external network
address of said [telephone] subscriber line assigned by said telecommunications network; and

wherein said [IP] routing means selectively routes the voice and data signals between said
telephone and computer, respectively, and said telecommunications network by establishing
respective connections between said [out site] external network address of said subscriber line
and said [respective in site] internal network addresses of said telephone and said computer, so
that both voice and data signals can be exchanged between said telephone and said computer
connected to said communications controller and devices communicatively connected to said
telecommunications network.

11. (Once Amended) Communications controller of claim 9, further comprising:

a voice circuit communicatively connected to said telephone and said [IP] routing means
for receiving and converting digital voice signals routed from said [IP] routing means into analog
voice signals for said telephone, and converting and feeding analog voice signals input from said
telephone into digital voice signals for said [IP] routing means.

12. (Once Amended) Communications controller of claim 9, wherein said voice circuit
comprises:

[a voice over IP gateway;]

an analog to digital converter for converting voice signals from said telephone into digital signals for routing to [said] a gateway that packetizes said digital signals;

a digital to analog converter for converting digital signals [received from] depacketized by said gateway into voice signals to be routed to said telephone;

a ring generator for ringing said telephone when a voice signal is received at said gateway;

a dual tone multi-frequency (DTMF) generator; and

a dial tone generator for generating dial tone for said telephone when said telephone is taken off hook.

13. (Once Amended) Communications controller of claim 9, further comprising:

a [voice over IP] gateway means for packetizing voice signals received from said [one in site] telephone interface means and depacketizing voice signals received from said [IP] routing means, packetized voice signals being routed by said [IP] routing means for transmission to said telecommunications network and depacketized voice signals being routed to said [one in site] telephone interface means for establishing a telephone connection between a caller using said telephone and an other caller connected to said telecommunications network via [an other] another telephone.

14. (Once Amended) Communications controller of claim 9, [further comprising:]
wherein said routing means includes an address conversion and translation means for translating the respective internal network addresses of said telephone and computer to correspond with an external network address of said [telephone] subscriber line assigned to communicate with said telecommunications network.

15. (Once Amended) Communications controller of claim 9, wherein said [IP] routing means apportions the bandwidth of said [telephone] subscriber line for selectively routing the voice signals and data signals between said telephone and computer, respectively, and said telecommunications network.

16. (Once Amended) Communications controller of claim 13, further comprising:
a packet prioritization module for setting respective priorities for voice and data signals, said packet prioritization module prioritizing voice signals over data signals so that voice signals take precedent over data signals when both voice and data signals are being communicated between said site and said telecommunications network using said [telephone] subscriber line.

17. (Once Amended) A method of utilizing [one telephone] a subscriber line at a site to [simultaneously effect at least] provide voice and data communication with a telecommunications network, comprising the steps of:

[a]) connecting [at least one out site] a network interface [means] to said [one telephone] subscriber line for effecting a connection with said telecommunications network;

[b]) connecting [at least one] a telephone to [at least one in site] a telephone interface [means] for establishing a connection with said telephone;

[c]) connecting [at least one] a computer to [an other another in site] a computer interface [means] for establishing a connection with said computer; and

[d]) communicatively connecting [an internetwork protocol (IP) routing means] a router to said [respective interface means] network, telephone and computer interfaces for assigning internal network addresses to said telephone and said computer, respectively, and for selectively

routing voice signals and data signals between said telephone and computer, respectively, and said telecommunications network so that both voice and data signals are [simultaneously] communicated between said site and said telecommunications network using said [telephone] subscriber line and based on said assigned internal network addresses.

18. (Once Amended) Method of claim 17, wherein said [IP routing means] router apportions the bandwidth of said [telephone] subscriber line for selectively routing the voice signals and data signals between said telephone and computer, respectively, and said telecommunications network.

19. (Once Amended) Method of claim 17, wherein said communicatively connecting step [d] further comprises the step of:

prioritizing voice signals over data signals so that voice signals take precedent over data signals when both voice and data signals are being communicated between said site and said telecommunications network using said [telephone] subscriber line.

20. (Once Amended) Method of claim 17, further comprising the steps of:

[assigning respective in site addresses for said telephone and computer and] correlating said [respective in site] internal network addresses with an [out site] external network address of said [telephone] subscriber line assigned by said telecommunications network; and

establishing respective connections between said [out site] external network address of said subscriber line and said [respective in site] internal network addresses of said telephone and computer for selectively routing the voice and data signals between said telephone and computer, respectively, and said telecommunications network to thereby exchange both voice and data

signals between said telephone and said computer and devices communicatively connected to said telecommunications network.

21. (Once Amended) Method of claim 17, further comprising the step of:

communicatively connecting a voice circuit to said telephone and said [IP routing means] router for receiving and converting digital voice signals routed from said [IP routing means] router into analog voice signals for said telephone, and converting and forwarding analog voice signals output from said telephone into digital voice signals for said [IP routing means] router.

22. (Once Amended) Method of claim 17, further comprising the steps of:

converting analog voice signals from said telephone into digital voice signals for routing to a [voice over IP] gateway that packetizes said digital voice signals;

converting digital voice signals [received from] depacketized by said gateway to analog voice signals to be routed to said telephone;

ringing said telephone when a voice signal is received at said gateway; and

generating a dial tone for said telephone when said telephone is taken off hook.

23. (Once Amended) Method of claim 17, further comprising the step of:

packetizing voice signals received from said [one in site] telephone interface [means] and depacketizing voice signals from said [IP routing means] router, packetized signals being routed by said [IP routing means] router for transmission to said telecommunications network and depacketized voice signals being routed to said [one in site] telephone interface [means] for establishing a telephone connection between a caller using said telephone and [an other] another caller connected to said telecommunications network via [an other] another telephone.

24. (New) Apparatus of claim 1, further comprising:

a voice circuit for receiving and converting data routed from said routing means to said telephone, and for converting and feeding voice signals input from said telephone to said routing means.

25. (New) A communications device configured to communicate with a communications network over a subscriber line, comprising:

a plurality of interfaces respectively configured to communicate with a telephone, a computer, and the communications network over the subscriber line; and

logic configured to assign respective internal network addresses for the telephone and the computer, translate between the respective internal network addresses and an external network address assigned to the subscriber line, and route voice and data signals among the telephone and the computer and the communications network over the subscriber line and based on the assigned internal network addresses and the external network address assigned to the subscriber line.

26. (New) A method for communicating with a communications network over a subscriber line using a communications device, the method comprising:

assigning respective internal network addresses for a telephone and a computer;

translating between the respective internal network addresses and an external network address assigned to the subscriber line; and

routing voice and data signals between the telephone and the computer and the communications network over the subscriber line based on the assigned internal network addresses and the external network address assigned to the subscriber line.--.